

county, Minnesota, shows in some specimens a very abundant formation of root-hairs. Copious material has been secured and a full description will follow later, if it turns out upon further examination of recent literature that such description is necessary.

SHORE FORMATION OF *EQUISETUM LIMOSUM*.—In the upper Cullen lake, the third of the series and at the head of the chain, a most luxuriant growth of *Equisetum limosum* has been noted. This plant takes the place of *Scirpus lacustris* over large areas and produces a characteristic shore and bar formation. In some places it is the only plant growing over areas many acres in extent. It reaches out into five or six feet of water and fringes the shore to a depth of four or five rods or even more. Much of the plant is var. *polystachyum* Brückner, while the type is rather more abundant. Nothing like this has previously been met with during a rather extended experience among the lakes of Minnesota. Commonly the plant, while abundant enough, does not produce a solid formation but is scattered amid sedges, rushes and limnetic grasses. At upper Cullen lake it covers territory doubtless a square mile or more in extent, to the total exclusion of any other archeogoniate and of all metasperms. This gives a peculiar and highly archaic aspect to the shores and bars of the lake in question.—CONWAY MACMILLAN

EDITORIAL.

THE ANNOUNCEMENT of an International Botanical Congress in America has drawn out some adverse criticism, and has excited considerable apprehension regarding the success of the movement. It is more than three years since the GAZETTE suggested that such a congress be held. There has been no material change in the conditions as understood at that time and as existing now. The feeling of uncertainty regarding the wisdom of calling for a congress is largely based upon the strong probability that comparatively few of the prominent European botanists will find it convenient to attend, owing to the distance. No one is in a better position to appreciate this, and the other difficulties connected with the project, than the members of the committee. Yet it has seemed best in the face of various obstacles to issue a call for the congress.

THE TERM "congress" calls up very different concepts in the mind of different persons. As to the distribution of the membership, it is claimed by Otto Kuntze the conclusions of the Genoa congress were invalidated because it consisted of sixty Italians and forty foreigners.

and was therefore degraded from an international to a local congress, the Madison gathering bids fair to result even more disastrously, for one correspondent declares that it is "likely to be less than national, even and altogether provincial-American." The Genoa congress has also been assailed as lacking authority to act, because its members were not truly representative; "*er hat sich also Gesetzgebung ange-masst.*" The Madison Congress lays itself open to the same criticism. The opinion is also held that it is "outrageous to announce a program from which all original research is excluded," from which it may be inferred that any limitation of subjects whatever would find objectors.

THE SPACE at command does not permit a discussion of what an ideal congress might be, or even what the gathering at Madison might have been under other conditions and management; and all that can be attempted is to give a brief statement of what the Madison congress can reasonably be expected to accomplish under existing circumstances.

In the first place the Madison congress is at the close of a series of brilliant gatherings of American scientific societies extending over nearly two weeks. These societies are furnished with the necessary machinery for receiving, hearing and publishing papers, and will consider it an honor to accord visiting scientists from abroad the same privileges enjoyed by their own members. The visitor will find in these several audiences most appreciative and responsive listeners. By this fortunate circumstance the congress is enabled to exclude papers of research, as well as others which do not bear directly upon uniformity of usage, knowing that all interests will thus be even better subserved than could be done by any other method.

This arrangement also removes a most formidable difficulty as to time. The Genoa congress discussed but one small phase of the nomenclature question, less than was considered at the Rochester meeting, and heard but a few papers, and yet occupied a week. It would probably be impossible to keep the Madison congress together a week however interesting the program, following as it does such a long series of scientific gatherings. Yet it is desirable that the subjects considered should possess variety, as there are many botanists who "don't enjoy the prospect of being dosed with 'nomenclature'." To get variety with limited time and yet accomplish important results requires careful selection of topics.

THERE ARE QUESTIONS in various departments, many more than can be settled or even considered by a single congress, which demand attention from all those interested in the advancement of the respective

departments. In order that these questions may be suitable for the program of an international congress they should interest botanists, of whatever locality, or whatever language, and be genuinely debatable. Matters of fact do not call for discussion, but for investigation. Deductions, opinions, methods, usage and doctrines may be discussed. The class of questions most intimately affecting a large number of botanists, and which can be brought to a satisfactory solution easier and quicker by word of mouth than by pen are those relating to usage, and of these the nomenclature of classification is the most prominent, and should first receive attention.

To say that one is already tired of the seemingly interminable discussion of the nomenclature question is frivolous. It is a fundamentally important matter, and can only be settled by a better general understanding of the situation, and an authoritative agreement upon the chief points in debate. The sooner this is done the better for the whole science of botany, and of the allied fields of horticulture, etc. He who will not take hold of the work at hand because it is not the kind preferred, may be looked upon as a doubtful helper at any time.

BUT WHILE the so-called nomenclature question should be taken up by the congress, because most prominent and most urgent, there is no reason, and no disposition so far as we know, to exclude other questions suitable to the occasion. If any one has a topic in mind which he thinks appropriate for such a gathering, he should communicate it to some member of the committee. Whoever has nothing to offer, however, would do well to bear in mind that it is unquestionably bad taste for him who does not work to criticise him who does.

THE OPPONENTS of the congress are undoubtedly right in saying that a congress which does not uniformly represent the several botanical interests in various parts of the world, can not properly assume to exercise the full powers of legislation. But the questions upon which a well constituted congress are to pass can not be settled by a single discussion, and gatherings like that to be held at Madison, even if imperfectly representative, will greatly hasten a better general understanding and lead up to the final decision. It is a case of doing what one can and working toward the desired goal, rather than waiting idly for the ideal opportunity.

THERE IS STILL another reason why a congress should be held at this time. America needs to be botanically discovered by Europeans. The country has botanical wealth; a little crude, it may be, when compared with foreign riches, but still there is wealth, and it has yet barely come to the notice of most foreigners. What better time could there be, than when all the world is looking toward Chicago, to direct

the attention of the botanists of the world toward botanical activity in America? If the present congress does not prove all that its well wishers could desire, it may yet be the means of eventually securing upon American soil the truly representative international congress to which all will be willing to concede authority.

CURRENT LITERATURE.

A guide to wild flowers.

A short cut is always in order. Very frequently, however, one needs to be well posted in the geography of a country before a short cut is safe. It seems to us so with the book before us.¹

Mrs. Dana endeavors to make a book which shall enable one to name plants which he is able to find without using "some key which positively bristles with technical terms and outlandish titles," and this because "their names alone serve as a clue to their entire histories." She has selected about 400 of the most conspicuous flowering plants of the northern United States, omitting the commonest and best known, as well as those with inconspicuous flowers, or those which are rare or introduced as escapes from gardens. Illustrations of very decided artistic excellence and accuracy are used freely. Ninety-seven of the 104 full page plates are original. Those species which are of the greatest beauty, interest, or frequency, have been selected for these drawings.

The plants are arranged in accordance with their colors and the season of blossoming. White, yellow, pink, red, blue and purple, and "miscellaneous" are the six main groups. It would seem however that some further subheads than these would have been exceedingly convenient. The descriptions of the plants with white blossoms cover nearly 100 pages, and one has to look over a considerable number of these in order to find any plant which he may have in hand. Nearly half of the white flowers enumerated belong to distinctively spring plants, and forty pages is rather a large area through which to look for the names. In our judgment the book would have been greatly improved had the author introduced some simple artificial keys which would have guided one in the path in which he is now left to grope.

¹DANA, MRS. WILLIAM STARR:—How to know the wild flowers: a guide to the names, haunts, and habits of our common wild flowers. Illustrated by Marion Satterlee. Third edition. 12mo. pp. xvi + 298. pl. 104. New York: Chas. Scribner's Sons. 1893.